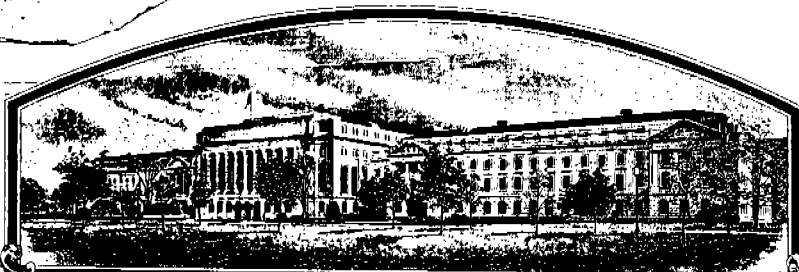


No.



7800015

# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**Nixon Seed Co. and Leonard Krietemeyer**

Whereas, THERE HAS BEEN PRESENTED TO THE  
**Secretary of Agriculture**

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS DETERMINED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'K-77'



In Testimony Whereof, I have hereunto set  
my hand and caused the seal of the Plant  
Variety Protection Office to be affixed  
at the City of Washington  
this 12th day of April in  
the year of our Lord one thousand nine  
hundred and seventy-nine

Attest:

*Lyman H. Lane*  
Commissioner  
Plant Variety Protection Office  
Grain Division  
Agricultural Marketing Service

*W. B. Dwyer*  
Secretary of Agriculture

## APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1a. TEMPORARY DESIGNATION OF VARIETY	1b. VARIETY NAME <b>K-77</b>	FOR OFFICIAL USE ONLY PV NUMBER <b>7800015</b>	
2. KIND NAME <b>SOYBEAN</b>	3. GENUS AND SPECIES NAME <b>GLYCINE MAX</b>	FILING DATE <b>12.29.77</b>	TIME <b>2:00 P.M.</b>
4. FAMILY NAME (BOTANICAL) <b>LEGUMINOSE</b>	5. DATE OF DETERMINATION <b>(9/69)</b>	FEE RECEIVED \$ <b>250.00</b> \$ <b>250.00</b> \$ <b>250.00</b>	DATE <b>12.29.77</b> <b>12.29.77</b> <b>3-12-79</b>
6. NAME OF APPLICANT(S) <b>KENNETH G. NIXON (NIXON SEED CO.) AND LEONARD &amp; MARK KRIETEMEYER</b>	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) <b>R.F.D. 2, MANSFIELD, OHIO 44903</b>	8. TELEPHONE AREA CODE AND NUMBER <b>419-589-3122</b>	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.)		10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION	11. DATE OF INCORPORATION

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

**KENNETH G. NIXON ROUTE 2 MANSFIELD, OHIO 44903**

## 13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☒ 13B. Exhibit B, Novelty Statement.
- ☒ 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- ☐ 13D. Exhibit D, Additional Description of the Variety.

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? (See Section 83(a). (If "Yes," answer 14B and 14C below.) ☒ YES ☐ NO14B. Does the applicant(s) specify that this variety be limited as to number of generations? ☒ YES ☐ NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed?

☒ FOUNDATION ☒ REGISTERED ☒ CERTIFIED15. Does the applicant(s) agree to the publication of his/her (their) name(s) and address in the Official Journal? ☒ YES ☐ NO

16. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

12/5/77

(DATE)

12-7-77

(DATE)

Kenneth G. Nixon  
(SIGNATURE OF APPLICANT)Leonard Krietemeyer  
Mark Krietemeyer  
(SIGNATURE OF APPLICANT)

1 -

## INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and \$250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, National Agricultural Library, Beltsville, Maryland 20705. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

## ITEM

- 5 Give the date the applicant determined that he had a new variety based on (1) the definition in Section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 13a Give (1), the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. (2), the details of subsequent stages of selection and multiplication. (3), the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4), evidence of stability.
- 13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties; (1) identify these varieties and state all differences objectively; (2) Attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form for all characteristics, for which you have adequate data.
- 13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe; such as; plant habit, plant color, disease resistance, etc.
- 14A If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled or published or the certificate has been issued. However, if the applicant specifies "NO", he may change his choice. (See Section 180.15 of the Regulations and Rules of Practice.)

PV No. 7800015  
SOYBEAN  
'K-77'

EXHIBIT A

'K-77' WAS DERIVED FROM A SELECTION OF FIVE PLANTS FROM A FIELD OF CERTIFIED 'CORSOY'. THIS SELECTION PRODUCED SEED WITH BOTH BUFF AND CLEAR HILA. BOTH WERE INCREASED IN SEPARATE PLOTS AND THE FINAL SELECTION WAS MADE EXCLUSIVELY FROM PLOTS PRODUCING SEED WITH CLEAR HILA.

THERE IS UP TO 0.05% BROWN OR BUFF HILUM. THIS HILUM COLOR VARIANT APPEARS TO BE STABLE AND WILL REPRODUCE NOT TO EXCEED 0.05%, ACCORDING TO EVALUATION BY ROY BECKER AND DAVE DENNISON OF THE OHIO SEED IMPROVEMENT ASSOCIATION.

'K-77' APPEARS STABLE AND UNIFORM FOR ALL OTHER CHARACTERISTICS THROUGH FOUR GENERATIONS OF INBREEDING.

Signature & Date

Kenneth G. Nixon 2/6/79  
Kenneth G. Nixon

PV No. 7800015  
SOYBEAN  
'K-77'

EXHIBIT B

'K-77' IS MOST SIMILAR TO 'CORSOY'. 'K-77' DIFFERS  
FROM 'CORSOY' IN THE FOLLOWING CHARACTERISTICS:

MATURITY - 'K-77' is 4 DAYS LATER THAN 'CORSOY'

PLANT HEIGHT - 'K-77' IS 18 cm TALLER THAN 'CORSOY'

POD COLOR - 'K-77' HAS TAN PODS vs BROWN PODS OF 'CORSOY'

MATURITY AND PLANT HEIGHT WERE EVALUATED BY DR. GORDON  
J. RYDER, EXTENSION AGRONOMIST, DEPT. OF AGRONOMY, THE  
OHIO STATE UNIVERSITY, COLUMBUS, OHIO.

POD COLOR WAS EVALUATED BY MR. ROY O. BECKER, SECRETARY-  
MANAGER OF THE OHIO SEED IMPROVEMENT ASSOCIATION.

Signature & Date Kenneth G. Nixon 2/6/79  
Kenneth G. Nixon

OBJECTIVE DESCRIPTION OF VARIETY  
SOYBEAN (GLYCINE MAX)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)

KENNETH G. NIXON &amp; LEONARD AND MARK KRIETEMEYER

ADDRESS (Street and No., or R.F.D. No.; City, State, and ZIP Code)

R.F.D. #2, MANSFIELD, OHIO

44903

FOR OFFICIAL USE ONLY

PVPO NUMBER

7800015

VARIETY NAME OR TEMPORARY  
DESIGNATIONK-77 4<sup>s</sup>

Place the appropriate number that describes the varietal character of this variety in the boxes below.

## 1. SEED SHAPE:

☒ 2

1 = SPHERICAL

2 = SPHERICAL  
FLATTENED

3 = ELONGATE

4 = OTHER (Specify)

## 2. SEED COAT COLOR:

☒ 1

1 = YELLOW

2 = GREEN

3 = BROWN

4 = BLACK

5 = OTHER (Specify)

## SHADE:

☐ 1

1 = LIGHT

2 = MEDIUM

3 = DARK

## 3. SEED COAT LUSTER:

☒ 1

1 = DULL

2 = SHINY

☒ 19

GRAMS PER 100 SEEDS

## 5. HILUM COLOR:

☒ 2

1 = BUFF

2 = YELLOW

3 = BROWN

4 = GRAY

5 = IMPERFECT  
BLACK

6 = BLACK 7 = OTHER (Specify)

## SHADE:

☒ 1

1 = LIGHT

2 = MEDIUM

3 = DARK

## 6. COTYLEDON COLOR:

R/S

☒ 2

1 = YELLOW

2 = GREEN

☒ 2

1 = SMALL

2 = MEDIUM

3 = LARGE

## 8. LEAFLET SHAPE:

☒ 1

1 = OVATE

2 = OBLONG

3 = LANCEOLATE

4 = ELLIPTICAL

5 = OTHER (Specify)

## 9. LEAF COLOR (See reverse):

☒ 2

1 = LIGHT GREEN

2 = MEDIUM GREEN

3 = DARK GREEN

## 10. FLOWER COLOR:

☒ 2

1 = WHITE

2 = PURPLE

3 = OTHER (Specify)

## 11. POD COLOR:

☒ 1

1 = TAN

2 = BROWN

3 = BLACK

☒ 2

1 = SCATTERED

2 = CONCENTRATED

## 13. PLANT PUBESCENCE COLOR:

☒ 1

1 = GRAY

2 = BROWN

3 = OTHER (Specify)

## SHADE:

☒ 1

1 = LIGHT

2 = MEDIUM

3 = DARK

## 14. PLANT TYPES (See Reverse):

☒ 1

1 = SLENDER

2 = BUSHY

3 = INTERMEDIATE

☒ 2

1 = DETERMINATE

2 = INDETERMINATE

3 = OTHER (Specify)

## 16. HYPOCOTYL COLOR:

R/S

☒ 2

1 = GREEN

2 = PURPLE

☐

1 = A

2 = B

## 18. NUMBER OF DAYS TO FLOWERING

(Place a zero in first box (e.g. 0 9) when days are 9 or less.)

☐ ☐

## 19. MATURITY GROUP:

☒ 4

1 = 00

2 = 0

3 = I

4 = II

5 = III

6 = IV

7 = V

8 = VI

9 = VII

10 = VIII

## 20. SIZE OF 10 DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT (Growth Chamber) AT 25° C. (Place a zero in first box (e.g. 0 2) when size is 9 mm. or less.)

R/S

☒ 11MM. LENGTH  
OF SEEDLING

R/S

☒ 23MM. LENGTH  
OF COTYLEDON

R/S

☒ 14MM. WIDTH  
OF COTYLEDON

## 21. DISEASE: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

☐ 0BACTERIAL  
PUSTULE☐ 0SOYBEAN  
CYST☐ 0DOWNY  
MILDEW☐ 0PURPLE  
STAIN☐ 0POD AND  
STEM BLIGHT☐ 0ROOT  
KNOT☐ 0

FROGEYE

☐ 0STEM  
CANKER☒ 1PHYTO-  
PHTHORA☐ 0BROWN  
STEM ROT☐ 0TARGET  
SPOT☐ 0BROWN  
SPOT☐ 0BUD  
BLIGHT☐ 0

WILDFIRE

☒ 0RHIZOCTONIA  
ROT☐ 0

OTHER (Specify)

4

## 22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant shape	<i>Corsoy</i>	Petiole angle	<i>Corsoy</i>
Leaf shape	<i>Harosoy 63</i>	Seed size	<i>Harosoy 63</i>
Leaf color	<i>Harosoy 63</i>	Seed shape	<i>Harosoy 63</i>
Leaf surface	<i>Corsoy</i>	Seedling pigmentation	<i>Corsoy</i>

## 23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY:

VARIETY	NO. OF DAYS TO MATURITY	LODGING SCORE	PLANT HEIGHT	LEAF SIZE		CONTENT		AVERAGE NO. OF PODS PER PLANT	IODINE NO.
				Width	Length	Protein	Oil		
Submitted	132	2-3	110CM	12MM	14MM		%	48	
Name of similar variety									

## INSTRUCTIONS

**GENERAL:** The following publications may be used as a reference aid for completing this form:

1. Scott, Walter O. and Samuel R. Aldrich, 1970, Modern Soybean Production, The Farmer Quarterly.
2. Norman, A. G., 1963, The Soybean: Genetics, Breeding, Physiology, Nutrition, Management.
3. McKie, J. W., and K. L. Anderson, 1970, The Soybean Book.

**LEAF COLOR:** Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following Soybean varieties may be used as a guide to identify the colors listed on the form.

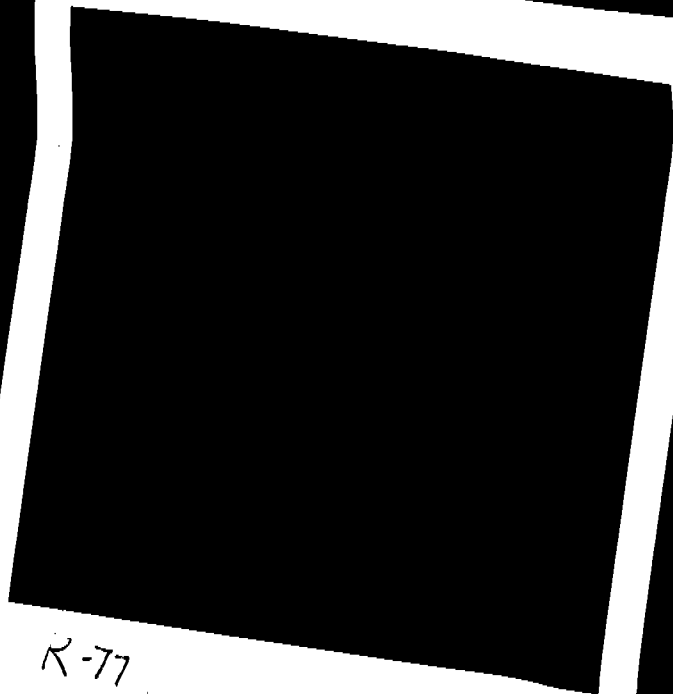
COLOR	VARIETY
Light Green	"Ada"
Medium Green	"Wilkin"
Dark Green	"Swift"

**LEAF SIZE:** The following varieties may be used as a guide to identify the relative size leaves.

SIZE	VARIETY
Small	"Amsoy"
Medium	"Bonus"
Large	"Anoka"

**PLANT TYPE:** The following varieties may be used as a guide to identify the plant type.

TYPE	VARIETY
Slender	"Vansoy"
Intermediate	"Wirth"
Bushy	"Adelphia"



R-77

CORSON



